Oxoaporphine alkaloids from the barks of Platymitra siamensis Craib (Annonaceae) and their cytotoxicity against MCF-7 cancer cell line

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Abstract

Study on the chemical constituents of the dichloromethane (DCM) crude extract of Platymitra siamensis Craib has led to the isolation of four oxoaporphine alkaloids. The compounds were identified as liriodenine (1), O-methylmoschatoline (2), lysicamine (3) and cepharadione-A (4) which were isolated first time from this species. The structures of the isolated compounds were elucidated based on their spectral data (H-1, C-13 and LCMS) and reports in the literature. Here we observed that, only alkaloid 1 exhibited obvious cytotoxic effects against MCF-7 human breast cancer cells line with IC50 value of 31.26 mu M. This work is the first attempt on phytochemical and bioactivity study on the genus of Platymitra.

Keywords

Author Keywords: Platymitra siamensis; Annonaceae; oxoaporphine alkaloids; MCF-7; cytotoxic activity
KeyWords Plus: APORPHINE ALKALOIDS; LEAVES; CONSTITUENTS; LIRIODENINE

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